

## **FACT SHEET**

### **GENERAL KPDES PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS**

#### **SWINE FEEDING FACILITIES**

KPDES No.: KYA1  
Date: September 27,

2000

#### **1. COVERAGE UNDER THIS GENERAL PERMIT**

##### **Permit Coverage Area:**

This permit covers all areas of the Commonwealth of Kentucky.

##### **Operations Eligible for Coverage:**

This permit covers all new and existing swine feeding operations classified as Concentrated Animal Feeding Operations (CAFOs) except those identified below. Swine feeding operations not classified as a CAFO are not required to have coverage under this general permit. Animal waste retention structures, animal holding areas, and land application areas are all considered part of a permitted CAFO operation.

##### **Limitations on Coverage:**

This permit does not authorize the following operations:

1. CAFOs that are subject to an existing individual KPDES permit.
2. CAFOs that the Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard or to the impairment of a 303(d) listed basin. Such CAFOs will be required to submit an application for an individual KPDES permit.
3. CAFOs that could discharge into surface water which has been classified as an Exceptional or Outstanding State or National Resource Water. Such CAFOs will be required to submit an application for an individual KPDES permit.
4. CAFOs that are in excess of 1,500 animal units. Such CAFOs will be required to submit an application for an individual KPDES permit.

## **2. REQUIREMENTS FOR GENERAL PERMIT COVERAGE**

### **Notice of Intent:**

A signed copy of the Notice of Intent (NOI) and a USGS topographical map with the facility location clearly marked must be submitted to the following address:

Kentucky Division of Water  
KPDES Branch  
Inventory and Data Management Section  
14 Reilly Road  
Frankfort, Kentucky 40601

Owners or operators who submit the above notification are authorized to operate under the terms and conditions of this permit upon receipt of written notification of coverage from the Division of Water.

The Director may deny coverage under this general permit and require submittal of an application for an individual KPDES permit based on a review of the NOI and/or other information.

### **Notice of Termination:**

In the event a permitted Animal Feeding Operation (AFO) is no longer classified as a CAFO, the owner or operator must submit a Notice of Termination (NOT) in order to terminate coverage under this general permit and nullify its requirements. NOTs are to be sent to the above address.

### **Change of Ownership:**

When the ownership of an operation covered by this permit changes, the new owner or operator must submit a notice of the change in order to transfer coverage under this general permit. Change of ownership notices are to be sent to the above address.

## **3. ADDITIONAL INFORMATION**

### **Construction Permit:**

Before constructing any type of liquid animal waste handling system, a construction permit must be obtained from the Division of Water. For information on how to obtain a permit, contact the KPDES Branch of the Division of Water at (502) 564-3410. This requirement applies to both new and existing operations of any size.

### **Common Ownership:**

Two (2) or more facilities under common ownership shall be considered one (1) operation for the purposes of determining applicability of this permit according to the total number of animal units present, if they adjoin each other, or if they use a common area or system for the disposal of waste.

### **Animal Units:**

The number of animal units present is calculated by multiplying the number of swine weighing over 55 pounds by 0.4. Other animal units at combined species operations must be added to the total.

#### **4. OPERATIONAL REQUIREMENTS AND LIMITATIONS**

##### **Effluent Limitations:**

There shall be no discharge of wastewater from animal waste retention structures, animal holding areas, or land application areas with the following exception: Process wastewater\* may be discharged whenever rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility designed, constructed, and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour rainfall event. Any such discharge shall be monitored in accordance with the monitoring requirements below.

\*Process wastewater includes any process generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

##### **25-year, 24-hour Rainfall Event Monitoring Requirements:**

In the event of a discharge, an estimate of total volume shall be made and a grab sample shall be taken of the overflow from the animal waste retention structure and analyzed for the following parameters: Total Suspended Solids, Fecal Coliform, Biochemical Oxygen Demand (5-day), Total Phosphorus, Dissolved Phosphorus, Ammonia Nitrogen, Total Kjeldahl Nitrogen, Nitrate Nitrogen, Temperature, and pH.

The sample must be taken during the first 30 minutes of discharge, if possible. If conditions are not safe for sampling due to local flooding, high winds, electrical storms, etc., the permittee shall collect a sample once dangerous conditions have passed and must provide documentation as to why timely samples could not be collected.

#### **5. JUSTIFICATION OF PERMIT CONDITIONS**

##### **Monitoring Requirements:**

The following requirements are pursuant to KRS 224.10-100, 224.70-100, and 224.70-110.

No Discharge of Process Wastewater - This requirement is consistent with 40 CFR Part 412, Subpart A.

Flow, Total Suspended Solids, Fecal Coliform, Biochemical Oxygen Demand, Total Phosphorus, Dissolved Phosphorus, Ammonia Nitrogen, Total Kjeldahl Nitrogen, Nitrate Nitrogen, Temperature, and pH - The monitoring requirements for these parameters are consistent with 401 KAR 5:065, Section 2(8).

##### **Best Management Practices:**

This requirement is consistent with 401 KAR 5:065, Section 2(10).

##### **Antidegradation:**

The conditions of 401 KAR 5:029, Section 1(1) have been satisfied by this permit action. A review under Section 1(2), (3), and (4) is not applicable.

#### **6. COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS**

The permittee shall attain compliance with the permit conditions upon notification of coverage under this general permit.

#### **7. PERMIT DURATION**

Five (5) years from date of issuance.

**8. PERMIT INFORMATION**

The application, draft permit, fact sheet, public notice, comments received, and additional information is available from the Division of Water at 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601.

**9. REFERENCES AND CITED DOCUMENTS**

All material and documents referenced or cited in this fact sheet are a part of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

**10. CONTACT PERSON**

Additional information concerning this permit may be obtained from Ronnie Thompson at the address noted in item 8 or at (502) 564-2225, extension 423.

**11. PUBLIC NOTICE INFORMATION**

Please refer to the attached Final Permit Decision Cover Letter or Public Notice for details regarding the procedures for a final permit decision, deadline for comments, and other information required by KAR 5:075, Sections 12 and 4(2)(e).

PERMIT NO.: KYA1

**GENERAL KPDES PERMIT FOR CONCENTRATED ANIMAL FEEDING OPERATIONS**

**SWINE FEEDING FACILITIES**

In compliance with the provisions of the Kentucky Revised Statutes Chapter 224 and pursuant to 401 KAR 5:055, Section 5, the following operations are authorized:

This permit covers all new and existing swine feeding operations, classified as Concentrated Animal Feeding Operations (CAFOs), that are required to have a permit pursuant to 401 KAR 5:055, Section 1 and KRS 224.16-050.

Specifically excluded from authorization under this permit are operations that:

1. Are subject to an existing individual KPDES permit.
2. The Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard or to the impairment of a 303(d) listed basin. Such CAFOs will be required to submit an application for an individual KPDES permit.
3. Could discharge into surface water that has been classified as an Exceptional or Outstanding State or National Resource Water. Such CAFOs will be required to submit an application for an individual KPDES permit.
4. Are in excess of 1,500 animal units. Such CAFOs will be required to submit an application for an individual KPDES permit.

The receiving water for any discharge authorized by this permit is located within the political boundaries of the Commonwealth of Kentucky. Such authorization is in accordance with the effluent limitations and other conditions set forth in PARTS I, II, III, and IV hereof. This permit consists of this cover sheet, PART I 1 page, PART II 1 page, PART III 1 page, and PART IV 3 pages.

This permit shall become effective on

This permit and the authorization to discharge shall expire at midnight,

**A. Effluent Limitations:**

There shall be no discharge of process wastewater from animal waste retention structures, animal holding areas, or land application areas with the following exception: Process wastewater\* may be discharged whenever rainfall events, either chronic or catastrophic, cause an overflow of process wastewater from a facility designed, constructed, and operated to contain all process generated wastewater plus the runoff from a 25-year, 24-hour rainfall event. Any such discharge shall be monitored in accordance with the monitoring requirements below.

\*Process wastewater includes any process generated wastewater and any precipitation (rain or snow) which comes into contact with any manure, litter or bedding, or any other raw material or intermediate product used in or resulting from the production of animals or poultry or direct products (e.g. milk, eggs).

**B. 25-Year, 24-Hour Rainfall Event Monitoring Requirements :**

In the event of a discharge, an estimate of total volume shall be made and a grab sample shall be taken of the overflow from the animal waste retention structure and analyzed for the following parameters: Total Suspended Solids, Fecal Coliform, Biochemical Oxygen Demand (5-day), Total Phosphorus, Dissolved Phosphorus, Ammonia Nitrogen, Total Kjeldahl Nitrogen, Nitrate Nitrogen, Temperature, and pH.

The sample must be taken during the first 30 minutes of discharge, if possible. If conditions are not safe for sampling due to local flooding, high winds, electrical storms, etc., the permittee shall collect a sample once dangerous conditions have passed and must provide documentation as to why timely samples could not be collected.

**C. Schedule of Compliance :**

The permittee shall attain compliance with the permit conditions upon notification of coverage under this general permit.

## PART II

### STANDARD CONDITIONS FOR KPDES PERMIT

#### A. General Conditions:

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

This permit shall not be construed as authorizing any operation that is otherwise in contravention of any law, regulation, ordinance, or order of any governmental unit.

This permit shall be subject at all times to revocation or modification by the Kentucky Natural Resources and Environmental Protection Cabinet as set forth in KRS 224.

Nothing herein shall be construed to authorize the creation or maintenance of a nuisance or to relieve the permittee from any penalty for violation of any law or regulation.

Whenever, by reason of emergency or accident, a spill or discharge occurs which results in pollution of the waters of the Commonwealth, the Division of Water shall be notified within 24 hours at 1-(800)-928-2380.

**PART III**

**OTHER REQUIREMENTS**

**A. Reporting of Monitoring Results :**

In the event that process wastewater is discharged, the results of the analysis required by PART I, Section B shall be submitted to the Division of Water within 30 days of the discharge at the address below:

Kentucky Division of Water  
KPDES Branch  
Inventory and Data Management Section  
14 Reilly Road  
Frankfort, Kentucky 40601

A copy of the results shall also be submitted to the appropriate Division of Water Regional Office within 30 days of the discharge. A list of Division of Water Regional Offices and the counties that they serve is included as Attachment A.

**B. Reopener Clause :**

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:080 and KRS 224 if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
2. Controls any pollutant not limited in this permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

**PART IV**  
**BEST MANAGEMENT PRACTICES**

**A. Siting Criteria:**

The following siting criteria shall apply to all land application areas and to all barns and lagoons constructed or expanded after February 14, 2000.

SETBACK FEATURE <sup>(3)</sup>	BARN, LAGOON	LAND APPLICATION AREA	
		Injection	Other Method
Dwelling not owned by applicant, church, school, schoolyard, business, other structure to which the general public has access, park <sup>(4)</sup>	1,500 feet	500 feet	1,000 feet
Incorporated city limit <sup>(4) (5)</sup>	3,000 feet	1,000 feet	2,000 feet
Lake, river, blue-line stream, karst feature	150 feet	75 feet	150 feet
Water well not owned by applicant <sup>(4)</sup>	300 feet	150 feet	150 feet
Downstream <sup>(1)</sup> water listed in 401 KAR 5:030 as exceptional water or outstanding national resource water; or outstanding state resource water <sup>(2)</sup>	1 mile	750 feet	1,500 feet
Downstream <sup>(1)</sup> public water supply surface water intake	5 miles	1 mile	1 mile
Roadways, primary (state and federal)	150 feet	75 feet	150 feet
Roadways, secondary (county)	150 feet	75 feet	150 feet

<sup>(1)</sup> Measured along gradient

<sup>(2)</sup> Designated outstanding state resource waters are listed in 401 KAR 5:026

<sup>(3)</sup> Measured from the edge of the barn, lagoon, or land application area to the nearest edge of the setback feature

<sup>(4)</sup> Existing at the time the first KPDES permit is issued

<sup>(5)</sup> For existing operations, land application setbacks do not apply to city limits

A barn or lagoon constructed or expanded after February 14, 2000, shall not be located in:

1. A state or national park or forest or nature preserve.
2. A wellhead protection area approved by the Cabinet, pursuant to 401 KAR 4:220.
3. A 100-year floodplain, unless permitted pursuant to 401 KAR 4:060.
4. A jurisdictional wetland as determined by the Natural Resources Conservation Service (NRCS).
5. A sinkhole or other enclosed depression where subsidence is evident.

A land application area shall not be located in:

1. A state or national park or forest, or nature preserve.
2. A wellhead protection area approved by the Cabinet, pursuant to 401 KAR 4:220.

**B. Visual Inspections and Additional Monitoring :**

The permittee shall make annual visual inspections of the animal waste retention structures, the animal holding areas and the land application areas in order to evaluate the potential for any wastewater discharges to waters of the Commonwealth. The permittee shall also take the following measurements and samples in accordance with the schedule set out below:

<u>Frequency</u>	<u>Measure</u>
Daily	Precipitation - The permittee shall maintain an on-site rain gauge
Daily	Amount of waste land applied and the number of acres utilized
Daily	Amount of waste which is transferred off site and its destination
Weekly	Percentage of remaining animal waste storage capacity
Annually*	Nitrogen and phosphorus content of process wastewater
Annually*	Phosphorus content of soil in land application fields

\*The permittee shall analyze the process wastewater and soils prior to the first crop-growing season after coverage under this permit begins and once a year thereafter.

The results of the annual inspections, the daily and weekly measurements, and annual analysis shall be kept in a log maintained at the facility and shall be made available to representatives of the Division of Water upon request.

**C. Comprehensive Nutrient Management Plan :**

Until October 2001, the permittee shall operate in accordance with the waste management plan submitted with the application, upon issuance of this permit. Effective October 2001, the permittee shall develop and maintain a site specific Comprehensive Nutrient Management Plan (CNMP). The CNMP shall use the most recent Natural Resource Conservation Service (NRCS) guidelines or equivalent for waste management as a basis, and also incorporate all applicable best management practices (BMPs) for the operation as set out in the Agriculture Water Quality Plan (AWQ Plan).

The primary purpose of the CNMP is to achieve the correct nutrient level (nitrogen and phosphorus) needed to grow the planned crop by balancing the nutrients already in the soil with the nutrients in the animal waste that is land applied. The CNMP should prevent the application of nutrients at rates that will exceed the capacity of the soil and crops to assimilate them. The CNMP should address the timing and method of land application activities and must specify how land application activities will comply with the applicable setback restrictions. The plan should also address the following BMPs that must be complied with upon permit issuance:

1. Animal waste retention structures shall be properly closed in the event they are taken out of operation.
2. Handling and disposal of dead animals shall be done in accordance with state veterinarian standards and procedures.
3. Chemicals shall not be introduced into wastewater or animal waste retention structures for disposal purposes.
4. Clean water shall be diverted from contact with animal waste retention structures or animal holding areas.

5. The land application of wastewater and solids shall be of a sufficiently low rate as to prevent any runoff to waters of the Commonwealth.
6. Land application activities should not occur on snow covered, frozen, or saturated ground.
7. Measures shall be taken to prevent the direct access of animals to waters of the Commonwealth.
8. Buffer strips shall be maintained around animal waste retention structures, animal holding areas, and land application areas to prevent soil erosion and to protect water quality.

The plan shall be prepared, implemented and submitted to the Division of Water at the address below by October 2001. The permittee shall maintain a copy of the CNMP on site and shall make the plan available to representatives of the Division of Water upon request. The plan shall contain a statement certifying that the CNMP meets all applicable permit requirements and must be signed by the permittee.

Kentucky Division of Water  
KPDES Branch  
Inventory and Data Management Section  
14 Reilly Road  
Frankfort, Kentucky 40601

The permittee shall amend the CNMP whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the release of pollutants.

If at any time following the issuance of this permit, the CNMP is found to be inadequate pursuant to a state or federal site inspection or plan review, the plan shall be modified to incorporate such changes necessary to correct the inadequacy.

**NOTE:**

If all of the components of the CNMP required by this permit are incorporated into the AWQ Plan, then a separate CNMP is not necessary and the permittee may operate under one comprehensive AWQ Plan subject to the enforcement provisions of this permit and the KPDES program.